Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-9.   (Cancelled)

10.   (Currently Amended) The computer of claim [[16]]42, wherein the self-repair is initiated by a signal indicating a need for repair that is either: (i) self-generated by the computer without human intervention by the monitoring the processes running or enabled within the user computing environment; or (ii) generated by the computer in response to a single action by an external user, said single action selected from the set of actions consisting of: pressing a key or combination of keys on a keyboard of the computer and pressing or changing the state of a physical switch different from an on-off switch of the computer and exposed on an exterior surface of the main computer hardware box of the computer.

Claims 11-15.   (Cancelled)

Claim 16.   (Cancelled)

17.   (Currently Amended) The computer of claim [[16]]42, wherein the repairing comprises: automatically repairing software on the first storage device according to preset preferences without further direction from the user, the preset preferences designating to repair the computer according to whether: to recover data, to run a virus check, to reformat the first storage device, to revert to a backup, or to run diagnostics.

18.   (Currently Amended) The computer of claim [[16]]42, wherein the repairing comprises: reformatting the first storage device and then copying software onto the first storage device; or resetting parameters in a persistent memory and then copying software onto the first storage device.

Claims 19-20.   (Cancelled)

21.   (Currently Amended) A computer as in claim [[16]]42, further comprising means for backing up programs and data on the computer and recovering the computer to a predetermined state in the event of a viral, hacker, or other malicious code contamination of the computer.

22.   (Previously Presented) A computer as in claim 21, wherein the means for backing up includes means for obtaining at least one snap-shot of data on the computer.

23.   (Currently Amended) A computer as in claim [[16]]42, wherein the self-repairing of the computer to [[an]] a specified operational state [[in]] is performed on-the-fly during normal operation without user intervention.

24.   (Currently Amended) A computer as in claim [[16]]42, wherein the computer in operation automatically executes a plurality of individual computing processes selected from the set of computing processes consisting of monitoring the user computing environment, tracking the user computing environment, predicting the stability of the user computing environment, backing-up the user computing environment, restoring the user computing environment, and recovering attributes within the user computing environment.

25.   (Previously Presented) A computer as in claim 24, wherein the attributes may be software specific, data specific, operating system specific, or any combination of the software, data, and operating system attributes.

26.   (Previously Presented) A computer as in claim 24, wherein execution of the plurality of computing processes facilitates the normal operation of the user computing environment.

27.   (Currently Amended) A computer as in claim [[16]]42, wherein the user computing environment is stabilized without user intervention that would perform a user to shut-down, restart, log off, log on, or termination of applications executing on the computer.

28.   (Currently Amended) A computer as in claim [[16]]42, wherein the supporting
environment is operative to interact with the user computing environment.

29.   (Currently Amended) A computer that self-repairs to maintain an operational
status at any time during operation, the computer comprising:
        a main computer hardware box;
        at least one CPU disposed within the main computer hardware box;
        at least one random access memory disposed within the main computer hardware box
and coupled to the at least one CPU;
        the at least one CPU and random access memory providing at least one user computing
environment and a supporting computing environment substantially isolated from the user
computing environment and operative to enhance the stability and functionality of the user
computing environment by monitoring processes running or enabled within the user computing
environment;
        first and second controllers for respective first and second data storage devices
disposed within the main computer hardware box of the computer prior to a need for repair, the
first data storage device storing programs and data for the user computing environment and the
second data storage device being associated with the supporting computing environment and
containing at least one backup snap-shot; and
        means for controlling the self-repair of the computer cooperatively coupled with said at
least one CPU, said at least one random access memory, and said first and second controllers;
        wherein the supporting environment is operative to interact with the user computing
environment and A computer as in claim 28, wherein the supporting environment is operative to
initiate or cause the user computing environment to shut-down, restart, log off, log on, or
terminating applications executing on the computer.

30.   (Currently Amended) A computer as in claim [[16]]29, wherein the user
computing environment and the supporting environment function in different computing systems
physically residing in the main computer hardware box.

31.   (Currently Amended) A computer that self-repairs to maintain an operational
status at any time during operation, the computer comprising:

a main computer hardware box;

at least one CPU disposed within the main computer hardware box;

at least one random access memory disposed within the main computer hardware box
and coupled to the at least one CPU;

the at least one CPU and random access memory providing at least one user computing
environment and a supporting computing environment substantially isolated from the user
computing environment and operative to enhance the stability and functionality of the user
computing environment by monitoring processes running or enabled within the user computing
environment;

first and second controllers for respective first and second data storage devices
disposed within the main computer hardware box of the computer prior to a need for repair, the
first data storage device storing programs and data for the user computing environment and the
second data storage device being associated with the supporting computing environment and
containing at least one backup snap-shot; and

means for controlling the self-repair of the computer cooperatively coupled with said at
least one CPU, said at least one random access memory, and said first and second controllers;

A computer as in claim 16, wherein the user computing environment system comprises a
separate data storage device, random access memory, and processor from the supporting
computing environment, and a video processor.

32.   (Previously Presented) A computer as in claim 31, wherein the supporting
computing environment system comprises a master template data storage device, a random
access memory, and a processor.

33.   (Previously Presented) A computer as in claim 32, wherein the computing
environment system data storage devices and the supporting computing environment system
data master template data storage device may be linked as needed to perform repairs on the
computer system, optionally including performing a copy operation from the supporting
computing environment to the user computing environment.

34.   (Currently Amended)   A computer as in claim [[16]]31, wherein the computer further comprises means for obtaining a snap-shot of the user computing environment and means for subsequently using the snap-shot to restore, analyze, or enhance the stability of the user environment.

35.   (Previously Presented)   A computer that self-repairs to maintain an operational status at any time during operation, the computer comprising:
    a main computer hardware box;
    at least one CPU disposed within the main computer hardware box;
    at least one random access memory disposed within the main computer hardware box and coupled to the at least one CPU;
    the at least one CPU and random access memory providing at least one user computing environment and a supporting computing environment substantially isolated from the user computing environment and operative to enhance the stability and functionality of the user computing environment by monitoring processes running or enabled within the user computing environment;
    first and second controllers for respective first and second data storage devices disposed within the main computer hardware box of the computer prior to a need for repair, the first data storage device storing programs and data for the user computing environment and the second data storage device being associated with the supporting computing environment and containing at least one backup snap-shot;
    means for controlling the self-repair of the computer cooperatively coupled with said at least one CPU, said at least one random access memory, and said first and second controllers;
    means for obtaining a snap-shot of the user computing environment; and
    means for subsequently using the snap-shot to restore, analyze, or enhance the stability of the user environment;
    A computer as in claim 34, wherein the snap-shot includes at least one of: (i) a stable image of the operating system, software applications, and user data; (ii) an idealized or stable version of a data storage device utilized by the user environment; (iii) a subset of the data storage device of the user environment such as an individual partition of a hard disk drive data

storage device; (iv) an idealized version or image of the user system random access memory; (v) an idealized version or image of the user system disk drive; (vi) an idealized version or image of the user system partition image, memory of the video card, or any other memory stored or utilized in the user computing environment.

36.   (Currently Amended) A computer as in claim [[16]] 35, wherein the monitoring includes monitoring of the utilization of the user computing environment data storage device and data contained on the user computing environment data storage device.

37.   (Previously Presented) A computer as in claim 36, wherein the monitoring of the user computing environment by the supporting computing environment identifies undesired changes and potential problems with the user computing environment.

38.   (Previously Presented) A computer as in claim 37, wherein the supporting computing environment detects at least one of a freeze and an undesirable change within the user computing environment.

39.   (Previously Presented) A computer as in claim 38, wherein when a freeze or other undesirable change is detected in the user environment, the supporting environment attempts to recover or restore or repair the user environment.

40.   (Currently Amended) A computer as in claim [[16]] 35, wherein the supporting computing environment is operative to re-enable the user environment, the [[en-enabling]] enabling selected from the set consisting of: resetting a locked user environment keyboard, resetting connections, resetting and clearing devices, replacing defective software components, switch hardware components and/or devices, and combinations of these.

41.   (Currently Amended) A computer as in claim [[41]]40, wherein the supporting computing environment obtains at least one snap-shot and subsequently copies all or part of the data from one or more of the at least one snapshots to recover or restore or repair the user environment.

42.   (Previously Presented) A computer that self-repairs to maintain an operational status at any time during operation, the computer comprising:

a main computer hardware box;

at least one CPU disposed within the main computer hardware box;

at least one random access memory disposed within the main computer hardware box and coupled to the at least one CPU;

the at least one CPU and random access memory providing at least one user computing environment and a supporting computing environment substantially isolated from the user computing environment and operative to enhance the stability and functionality of the user computing environment by monitoring processes running or enabled within the user computing environment;

first and second controllers for respective first and second data storage devices disposed within the main computer hardware box of the computer prior to a need for repair, the first data storage device storing programs and data for the user computing environment and the second data storage device being associated with the supporting computing environment and containing at least one backup snap-shot;

means for controlling the self-repair of the computer cooperatively coupled with said at least one CPU, said at least one random access memory, and said first and second controllers; and

A computer as in claim 16, wherein the computer further comprises means for running a plurality of different programs at the same time on one computing system where the data and applications for each of the plurality of different programs are isolated from one another but share output and/or input devices.

43.   (Previously Presented)   A computer as in claim 42, wherein the plurality of different programs are isolated by executing the applications in separate address spaces.

44.   (Previously Presented)   A computer as in claim 42, wherein the plurality of different programs are isolated by utilizing a different one of plurality of separate data storage devices for each program.

45. (Previously Presented) A computer as in claim 42, wherein commands are sent from one isolated data storage device or process to another isolated data storage device or process by launching an application through a shared hardware application specific integrated circuit (ASIC) to the other isolated data storage device.

46. (Previously Presented) A computer as in claim 44, wherein data from a plurality of user computing environments is isolated but the display of the plurality of user computing environments is merged onto a common display.

47. (Currently Amended) A computer that self-repairs to maintain an operational status at any time during operation, the computer comprising:

a main computer hardware box;

at least one CPU disposed within the main computer hardware box;

at least one random access memory disposed within the main computer hardware box and coupled to the at least one CPU;

the at least one CPU and random access memory providing at least one user computing environment and a supporting computing environment substantially isolated from the user computing environment and operative to enhance the stability and functionality of the user computing environment by monitoring processes running or enabled within the user computing environment;

first and second controllers for respective first and second data storage devices disposed within the main computer hardware box of the computer prior to a need for repair, the first data storage device storing programs and data for the user computing environment and the second data storage device being associated with the supporting computing environment and containing at least one backup snap-shot; and

means for controlling the self-repair of the computer cooperatively coupled with said at least one CPU, said at least one random access memory, and said first and second controllers;

A computer as in claim 16, wherein a first hard disk drive storage device associated with a first user computing environment that does not contain sensitive data is connected to a network but is isolated from a second hard disk drive storage device associated with a second

user computing environment by means of switching, the processing for the first and second computing environments being maintained in isolated secure zones within a single computer; and the video signals associated with the isolated first and second computing environments and the data coming from the first and second hard disk drive storage devices is merged for display onto a common computer display screen so that it appears to a user that the first and second processes were being performed on the same computer without isolation.

48.   (Previously Presented) A computer as in claim 47, wherein the isolation of the first and second user computing environments prevents potentially infectious viral data or hacker code exposed from the first network connectable computing environment from contaminating the second computing environment.

49.   (Currently Amended) A computer as in claim [[16]]47, wherein both the user computing environment and the supporting computing environment reside on a single computer system;

a snap-shot associated with the supporting computing environment of the operational user environment is obtained;

processes associated with the supporting environment monitor the activities and status of the user computing environment;

a monitoring function is executed that detects any degraded performance of the user computing environment and notifies the supporting environment of any degraded performance detected; and

the supporting environment performing any recovery or repair action as necessary to recover or restore the user environment, the recovery optionally including utilizing the snap-shot to recover or restore the user environment.

50.   (Currently Amended) A method for repairing and maintaining operation of a computer on the fly, the method comprising:

defining at least one user computing environment and a supporting computing environment substantially isolated from the user computing environment within at least one processor and coupled random access memory, the supporting computing environment operative to enhance the stability and functionality of the user computing environment by

monitoring processes running or enabled within the user computing environment and identifying a change signaling the need for a repair;

storing programs and data for the user computing environment on a first data storage device and storing a back-up snap-shot of at least portions of the first data storage device on a second data storage associated with the supporting computing environment and both the first and second data storage device disposed within the main computer hardware box of the computer prior to a need for repair;

the snap shot including at least one of: (i) a stable image of the operating system, software applications, and user data; (ii) an idealized or stable version of a data storage device utilized by the user environment; (iii) a subset of the data storage device of the user environment such as an individual partition of a hard disk drive data storage device; (iv) an idealized version or image of the user system random access memory; (v) an idealized version or image of the user system disk drive; (vi) an idealized version or image of the user system partition image, memory of the video card, or any other memory stored or utilized in the user computing environment;

executing a plurality of individual computing processes selected from the set of computing processes consisting of monitoring the user computing environment, tracking the user computing environment, predicting the stability of the user computing environment, backing-up the user computing environment, restoring the user computing environment, and recovering attributes within the user computing environment; and

repairing the computer using the snap-shot backup in response to the identification of the [[a]] change signaling the need for a repair.